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# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 11158733  
PUBLICATION DATE : 15-06-99

$$\mu (W) \leq 0.2$$

APPLICATION DATE : 26-11-97  
APPLICATION NUMBER : 09324797

I

APPLICANT : TOYOBO CO LTD;

INVENTOR : ISODA HIDEO;

INT.CL. : D01F 8/14 D01D 5/34 D02J 1/22  
D04H 1/42 // D04H 1/04

TITLE : POLYESTER STAPLE FOR WET TYPE  
NONWOVEN FABRIC HAVING LATENT  
CRIMPING DEVELOPMENT AND ITS  
PRODUCTION

$$\mu (W) / \mu (D) \leq 0.7$$

II

ABSTRACT : PROBLEM TO BE SOLVED: To obtain the subject staple for providing elastic nonwoven fabric having latent crimping development, light weight and excellent elongation recovery, by spinning a specific polyester A and a prescribed polyester B under specified conditions.

SOLUTION: This staple comprises a side by side type or an eccentric core- sheath type fiber comprising a polyester A composed of a polypropylene terephthalate as a main component and a polyester B composed of a polyethylene terephthalate as a main component and is obtained by melting the components so as to make the ratio of the polyester A to the polyester B of 30/70 to 70/30 by weight at a temperature 10-30°C higher than the melting point of each component, subjecting the polymers to the melt conjugate spinning in a side by side type or eccentric sheath core type, heat-treating the yarn in tension at 100-190°C treatment temperature in a drawing process, providing the yarn with an finishing oil, cutting the yarn into 2-100 mm length to give the a polyester staple for wet type nonwoven fabric satisfying equations 1 and II [ $\mu (W)$  is a friction coefficient between fibers in wetness;  $\mu (D)$  a friction coefficient between fibers in dryness].

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